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C-49-05-7-159

May 15, 1997

Project Number 4527

Ms. Rachel Johnson
Environmental Affairs Department
Building 4223 Rifle Range Road
Marine Corps Air Station Cherry Point
Cherry Point, NC 28533-0008

Reference: NAVY CLEAN CONTRACT N62472-90-D-1298
Subject: CTO NO. 187
RESTORATION ADVISORY BOARD MEETING MINUTES
MCAS CHERRY POINT, NORTH CAROLINA

Dear Ms. Johnson:

I have enclosed the Restoration Advisory Board (RAB) Meeting minutes from the March 27, 1997 RAB Meeting. I have also forwarded copies to all of the members of the RAB. Please feel free to call me at (412) 921-8992 if you have any questions.

Sincerely,

Gregory L. Zimmerman, P.E.
Project Manager

GLZ/vvp

Enclosure

cc: Mr. Roger Boucher, NORTHDIV w/o enclosures)
Mr. John Myers, MCAS Cherry Point (w/enclosures)
Ms. Christine Kartman, MCAS Cherry Point (w/enclosures)
Mr. Jay Bassett, USEPA (w/enclosures)
Ms. Linda Raynor, NCDEHNR(w/enclosures)
Ms. Cynthia Tschaepe, OHM (w/enclosures)
Mr. Tom Augspurger, USFW (w/enclosures)
Mr. Alex Cardinal, USGS (w/enclosures)
Ms. Lauren Hillman, USFS (w/enclosures)
Mr. John Lindsay, NOAA (w/enclosures)



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Ms. Beth Hartzell, NCDEHNR (w/o enclosures)
Mr. Richard Powers, NCDEHNR (w/enclosures)
Mr. Nick Tasheuras, MCAS Cherry Point (w/enclosures)
Ms. Grace Evans, (w/enclosures)
Ms. Patricia D. McClellan-Green, (w/enclosures)
Mr. Lewis Mitchell, (w/enclosures)
Mr. Neil Scarborough, (w/enclosures)
Mr. Harry Sermons, (w/enclosures)
Mr. Eugene Smith, (w/enclosures)
Mr. John Trepanowski, B&R Environmental(w/enclosures)
Mr. Matthew Cochran, B&R Environmental (w/enclosures)
Mr. Daryl Hutson, B&R Environmental (w/o enclosures)
File: CTO 187

**MCAS CHERRY POINT
RESTORATION ADVISORY BOARD (RAB)
MEETING MINUTES
MARCH 27, 1997 MEETING**

Attendees: Grace Evans (Community Co-chair),
MCAS Cherry Point - Rachel Johnson (Co-chair), Christine Kartman,
John Meyers,
NCDEHNR - Linda Raynor, Richard Powers,
LANTDIV - Lance Laughmiller
USGS - Charles Daniels, Dave Breedon
OHM - Cindy Tschaepe
Brown & Root Environmental - Greg Zimmerman

Rachel Johnson opened the meeting by thanking everyone for taking time out of their busy schedules to attend the meeting. She also indicated that the purpose of the meeting was to have the Partnering Team give an update on the Installation Restoration (IR) program to the RAB. In addition, Charles Daniels of the USGS was giving a presentation on the USGS Report "Application of Geophysical Methods to the Delineation of Paleochannels and Missing Confining Units Above the Castle Hayne Aquifers at the U.S. Marine Corps Air Station, Cherry Point, North Carolina".

Lance Laughmiller of LANTDIV gave an overview of where MCAS Cherry Point is in the IR Program by going over a Handout that provided a summary of the work being done at the Air Station (Handout attached to these minutes).

At OU1 (the industrial area of the Air Station), a Record of Decision (ROD) for the Interim Pump and Treat System for contaminated groundwater in the central portion of the OU has been signed. This system provides for the removal of contaminated groundwater from the surficial aquifer and treating it in air strippers to remove the high concentration of volatile organics from the groundwater. Originally, the Proposed Treatment System was to be a new system built in the vicinity of the Industrial Wastewater Treatment Plant (IWTP). The Design Team has been directed to reconsider using the IWTP for the treatment of the groundwater instead of building a new Treatment Plant.

Grace Evans asked why the use of the existing IWTP was being reconsidered. Lance Laughmiller explained that when this project first started, the IWTP had just been upgraded and nobody was sure of how well the Plant was operating. There is now a better working knowledge of how the IWTP is operating.

Lance also provided a brief update of the Stripper Barn Hot Spot Design. This project includes the pumping of contaminated groundwater from the area around the Stripper Barn and pumping it to the Treatment System that will be used for the Central Hot Spot Treatment (either the new Plant or the Current IWTP). The Design for this system, which will be Performance Specifications given to OHM, will be completed the first part of April.

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At Site 16 (Landfill at Sandy Branch), Lance indicated that a Treatability Study is being conducted. Lance noted that the Remedial Investigation/Focused Feasibility Study for the OU1 groundwater recommended treating the groundwater at Site 16. The Treatability Study is being conducted to gather information that will be used to design the proposed system. The proposed Treatment System at Site 16 will consist of a series of wells that will inject air into the groundwater to strip the contaminants from the groundwater and a series of extraction wells that will remove the air that contains the contaminants stripped from the groundwater. The system is intended to remove the contaminants from the groundwater before the groundwater enters Slocum Creek or Sandy Branch.

The Treatability Study and Design are to be completed in another 1 and 1/2 months. The Design will again be a series of Performance Specifications that will be given to OHM. Funding for the construction of the Proposed System is expected to be awarded in June, with the start of construction expected in October.

Charles Daniels asked how long the line of injection and extraction wells will be. Lance indicated that he thought that the line of wells will be 600 to 700 feet. Charles asked if that was going to be long enough to prevent contaminated groundwater from entering either stream. Lance replied that he believed that it was.

Lance then gave an overview of some of the work being done at OU1 under the Underground Storage Tank (UST) Program. Three horizontal wells have been installed underneath a portion of Building 137 to remove floating product from under the building. Currently, there is 5 feet of floating product under the building. It is estimated that 8,000 gallons of product per week will be removed from under Building 137. Grace Evans questioned how long it will take to remove all of the floating product. Lance indicated that it could take many months.

Grace also asked if it was a pool of product. Richard Powers indicated that it mostly likely was. The weight of the product can push the water level down so that a pool is formed. Grace asked if it was just in the surficial aquifer and whether it was present in the Yorktown aquifer. It was indicated that the material is found in only the surficial aquifer at this location.

Grace then asked if the source of the floating product has been identified. Rachel Johnson indicated that the source of the floating product is not certain. There are several possibilities: underground tanks, underground piping (although none has been identified in the area) or a current release. Richard Powers pointed out that the Air Station has eliminated a lot of underground tanks.

Lance then provided a brief overview of the work being done at OU2 (Old Sanitary Landfill). At OU2, low levels of a wide variety of contaminants have been found in all media, although there is not much correlation between the media as to the compounds and concentrations detected. Natural Attenuation is being evaluated for the treatment of the groundwater at OU2. Natural Attenuation includes intrinsic bioremediation, dilution, absorption, and other naturally occurring treatment processes.

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Lance also indicated that soil venting is being evaluated for the removal of potential sources of groundwater contamination. Long Term Monitoring will be conducted to confirm that Natural Attenuation is occurring.

Grace asked if the Site was going to be fenced off. Rachel replied that the site is already fenced.

Lance indicated that the Feasibility Study (FS), Proposed Remedial Action Plan (PRAP), Design of the soil venting system and a Treatability Study at one of the potential source area (soil hot spot) are being conducted and will be finishing up before this summer. The Treatability Study Treatment System will be operated as the Treatment System at that soil hot spot once the Treatability Study is completed. As with the Treatability Study at Site 16, information gathered during this Treatability Study will be used for the design of the Treatment Systems at OU2. The Design, which will be Performance Specifications given to OHM, is expected to be completed in the next 1 and 1/2 months. Funding for the construction of the systems will be awarded by the end of June.

Greg Zimmerman indicated that a Public Meeting similar to the one held for OU3 would most likely be held for OU2 sometime this summer. Grace reported that she and Rachel had discussed distributing the material that is presented at the Public Meetings to the RAB before the Public Meeting and having the RAB prepared to ask questions at the RAB meeting held in conjunction with the Public Meeting. That way, the presentation would not have to be presented at both the RAB Meeting and the Public Meeting. A discussion on why there is so little Public participation at Cherry Point ensued. Grace indicated that, for the most part, people do not see how anything being done at the Air Station affects them.

Grace then asked if we would look at cleaning up the soil, especially the lead, at Site 7 (OU3) if someone came in with a grant to find ways to clean up the site. Lance indicated that the Site will undergo 5-year reviews and it is possible that new technologies may become available where it is feasible to clean up the site. Richard Powers noted that to an extent, other facilities are experimenting with innovative technologies. Rachel Johnson noted that North Carolina State University is conducting a research project at Site 7 on the effects of changes in redox potential and pH on the mobility of heavy metals in soil.

Lance then provided an overview of the work that has been conducted at OU3. The Lime/Alum Sludge Ponds have been filled in and the area has been seeded with pines. Some of Site 7 has been fenced by the people running the Sewage Treatment Plant. The Sewage Treatment Plant is in the process of being fenced for other reasons and some of the fence happened to coincide with the proposed fencing at a portion of Site 7.

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Lance then indicated that there are investigations ongoing at two other Operable Units, OU4 and OU13. Both Sites are former borrow pits that have been used for the disposal of a variety of material. OU4 is currently a permitted construction debris landfill. Grace asked if the construction debris along Highway 101 was either OU4 or OU13. Greg Zimmerman indicated that the material that can be seen along Highway 101 is off Air Station Property. John Meyers indicated that he thought that area belonged to Chance Construction Company.

Lance indicated that the data for OU4 had been presented to the Partnering Team at a Meeting held the previous day and the data for OU13 would be presented at the next Partnering Meeting to be held on May 6 and 7.

Grace asked if the re-issue of the Permits for Storm Water would be considered in the IR Program. Richard Powers replied that the Storm Water Permits were separate from this Program and are handled by a different office within the State (Office of Surface Water).

Charles Daniels of the USGS then gave his presentation of the Report "Application of Geophysical Methods to the Delineation of Paleochannels and Missing Confining Units Above the Castle Hayne Aquifers at the U.S. Marine Corps Air Station, Cherry Point, North Carolina".

During his presentation, Charles reported that there are only two confining clay layers under the Air Station. The work done by USGS indicates that the Pungo River Confining Layer consists of sand under the Air Station. Charles also indicated that the work conducted by the USGS appears to indicate that in some areas of the Air Station, one of the other confining clay layers was not present due to the presence of a Paleochannel under that area of the Air Station.

MCAS Cherry Point Current Work Load FY97

DESCRIPTION	SCOPE		STATUS / SCHEDULE
OU1			
<u>STUDY/DESIGN</u>			
1. OU1 COMPREHENSIVE RI/FS/PRAP/ROD 90-1298 CTO-247	RI/FS/PRAP/ROD REPORT FOR AREAS NOT PREVIOUSLY ADDRESSED		PLANNING IN PROGRESS. START SCHEDULED FOR OCTOBER 99.
2. OU#1 NADEP CENTRAL HOT SPOT TREATMENT PLANT DESIGN 90-1298 CTO-238	GROUNDWATER P&T SYSTEM IN NADEP AND IWTP AREA		DESIGN ONGOING. COMPLETION IN APRIL 97. CONSTRUCTION FROM APRIL 97 TO APRIL 98.
3. OU#1 NADEP STRIPPER BARN HOT SPOT DESIGN 90-1298 CTO-266	PUMPING TEST AND GROUNDWATER P&T SYSTEM RECOVERY WELLS NEAR STRIPPER BARN		DESIGN SUBMITTAL IN MARCH 97. CONSTRUCTION FROM APRIL 97 TO APRIL 98.
4. SITE 16 TREATABILITY STUDY, DESIGN, AND INSTALLATION 90-1298 CTO-265	AIR SPARGING AND VAPOR EXTRACTION WELLS BEHIND SELF HELP BUILDING. DESIGN AND INSTALLATION OF MORE WELLS NEAR SLOCUM CREEK		TS SYSTEM OPERATING. DESIGN SUBMITTAL IN APRIL 97. CONSTRUCTION FROM OCTOBER 97 TO OCTOBER 98.
<u>CONSTRUCTION</u>			
1. HORIZONTAL WELLS BENEATH BLDG 137 (93-3032 DO#28)	FREE PRODUCT RECOVERY SYSTEM INSTALLED BY OHM FUNDED BY UST PROGRAM, SITE 23		CONSTRUCTION ONGOING. COMPLETION IN APRIL 97.
2. NADEP CENTRAL HOTSPOT TREATMENT PLANT CONSTRUCTION (93-3032 DO#79)	GROUNDWATER P&T SYSTEM IN NADEP AND IWTP AREA		INSTALLATION OF WELLS AND CONVEYENCE PIPING TO START 3/17/1997. CONSTRUCTION FROM MARCH 97 TO APRIL 98
3. STRIPPER BARN HOTSPOT ADDITIONAL WELLS (93-3032 DO#79)	ADDITIONAL HOT SPOT P&T GROUNDWATER RECOVERY WELLS NEAR STRIPPER BARN		DESIGN SUBMITTAL IN MARCH 97. CONSTRUCTION FROM APRIL 97 TO APRIL 98.
OU2 Study			
1. RI/FS/PRAP/ROD FOR OU#2 CTO-211	DOCUMENT PREPARATION FOR OU2. RECEIVED FINAL COMMENTS ON RI		SUBMITTALS FROM APRIL 97 TO OCTOBER 97, PLAN TO SIGN ROD THIS FY
2. DESIGN/ LTM PLAN FOR OU#2 CTO-239	NATURAL ATTENUATION OF GRAONDWATER INSTEAD OF P&T SYSTEM AT OU#2		SCOPE CHANGE TO SAVE 4 MILLION

MCAS Cherry Point Current Work Load FY97 (cont.)

3. SITE 10 LANDFILL, SVE TREATABILITY STUDY AND DESIGN CTO-265	SVE STUDY NEAR HOBBY SHOP AND WASH RACK, SVE DESIGN FOR INSTALLATION IN OTHER AREAS OF LANDFILL.		DESIGN SUBMITTAL IN SPRING 97. CONSTRUCTION FROM OCTOBER 97 TO OCTOBER 98.
OU2 Construction			
1. SVE SYSTEM FOR SOIL HOT SPOTS (93-3032 DO#80)	SOIL VAPOR EXTRACTION FOR HOT SPOTS IN 3 AREAS OF LANDFILL.		CONSTRUCTION AWARD JUNE 15, INSTALLATION AND START UP FROM 8/97 TO OCTOBER 98.
OU3			
1. <u>Study</u> : ROD FOR OU#3 Cto-190	RI/FS/PRAP/ROD COMPLETE. ROD WAITING TO BE SIGNED BY THE GENERAL		RECEIVED STATE CONDITIONAL CONCURRENCE LETTER
1. <u>Construction</u> : OU3 FENCE INSTALLATION/ INSTITUTIONAL CONTROLS (93-3032 DO#63)	REGRADING LIME ALUM PONDS AND INSTALLING FENCE		REGRADING COMPLETED. FENCE INSTALLATION FROM APRIL 97 TO JUNE 97.
OU4			
11. OU4 RI/FS/PRAP/ROD CTO-243	DOCUMENT PREPARATION FOR OU4		SUBMITTALS FROM JULY 97 TO JULY 98
OU13			
12. OU13 RI/FS/PRAP/ROD CTO-244	DOCUMENT PREPARATION FOR OU13		SUBMITTALS FROM OCTOBER 97 TO OCTOBER 98